



B711

PTO/SB/21 - MODIFIED  
09/2004**TRANSMITTAL  
FORM***to be used for all correspondence after initial filing*

Application Number	09/730,598
Filing Date	12/07/2000
First Named Inventor	Zining WU
Group Art Unit	2133
Examiner Name	Guy J. Lamarre
Attorney Docket Number	MP0069

Total number of pages in this submission including transmittal 16

**ENCLOSURES (check all that apply)**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached - credit card authorization<br><input type="checkbox"/> Amendment / Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement with PTO Form 1449<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application)<br><input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input checked="" type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input type="checkbox"/> Other Enclosure(s) (identify below): |
|---|---|---|

**REMARKS**

Communication to Examiner re: Initialed PTO Form 1449's with copies of 4 IDS's

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name KATTEN MUCHIN ROSENMAN, LLP

Signature

Printed Name Andrew J. Bateman

Reg. No. 45,573

Date: 09/13/2005

**CERTIFICATE OF FACSIMILE TRANSMISSION OR MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO via fax no. (703) 872-9306 or is being deposited with the US Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature

Typed or Printed Name

Date:



MP0069

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Zining WU, et al. ) Examiner: Guy J. LaMarre  
Application No.: 09/730,598 ) Group Art Unit: 2133  
Filed: December 7, 2000 ) Confirmation No.: 9230  
For: PARITY CHECK MATRIX AND ) Date: September 13, 2005  
METHOD OF FORMING THEREOF )

**COMMUNICATION TO EXAMINER**

**Mail Stop Issue Fee**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

A Notice of Allowance was issued in this application on August 4, 2005. A review of the Applicants' file and of the USPTO's electronic file wrapper indicates that initialed PTO 1449 forms for the following Information Disclosure Statements of record in the above-identified application have not been returned to the Applicants. For the convenience of the Examiner, copies of these Information Disclosure Statements are being submitted herewith.

Information Disclosure Statement filed May 18, 2005  
Information Disclosure Statement filed May 17, 2005  
Information Disclosure Statement filed December 28, 2004  
Information Disclosure Statement filed March 9, 2001

It is respectfully requested that the Examiner initial the attached copies of the 1449 Forms and return them to Applicants as soon as possible.

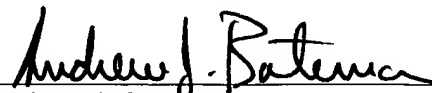
Should there be any questions, Applicants undersigned attorney can be reached at (202) 625-3547.

Respectfully submitted,

KATTEN MUCHIN ROSENMAN LLP

IP Docket  
Katten Muchin Rosenman, LLP  
1025 Thomas Jefferson St., NW  
East Lobby, Suite 700  
Washington, DC 20007-5201  
Facsimile No.: (202) 298-7570  
Customer No. 28285

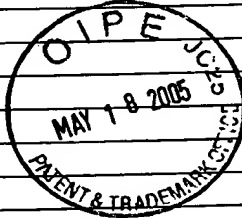
By:

  
Andrew J. Bateman  
Registration No. 45,573

Applicant(s): WU Date Sent: 5-18-05  
Client: \_\_\_\_\_ By: \_\_\_\_\_ 1st Class Mail  
App/Pat/Reg No.: 09/730,598 ☒ Hand-Carried  
Filing/Issue Date: 12-7-00 \_\_\_\_\_ Other  
Docket No.: 213200.48 (MP69) \_\_\_\_\_ U.S. P.O. Express Mail No.:  
Attorney: ASB  
Due Date: \_\_\_\_\_  
Title/Mark: Parity Check Matrix and Method of Forming Thereof

The U.S. Patent and Trademark Office date stamped hereon is the date on which the below-listed items were received:

Enclosures (including # of pages):



Transmittal 1  
IDS (Supplemental) 1  
1449 1

DOCKETED



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
)  
Zining WU, et al. ) Group Art Unit: 2133  
)  
Application No.: 09/730,598 ) Examiner: Guy J. Lamarre  
)  
Filed: December 7, 2000 ) Confirmation No.: 9230  
)  
For: PARITY CHECK MATRIX AND )  
METHOD OF FORMING THEREOF ) Date: May 18, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed PTO-1449.

In accordance with 37 CFR § 1.97(h), this Information Disclosure Statement is not to be construed as an admission that the information cited is or is considered to be material to patentability as defined in 37 CFR § 1.56(b), nor as an admission that the information constitutes prior art within the meaning of 35 USC §§ 102 and/or 103.

It is respectfully requested that the information listed on the PTO-1449 be considered by the Examiner, and that an initialed copy of the PTO-1449 be returned indicating that such information was considered.

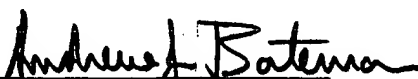
No fee is believed necessary. However, should it be deemed necessary by the USPTO, the Commissioner is authorized to charge the IDS fee of \$180.00 to Deposit Account No. 50-1710.

Should the Examiner have any questions, Applicants' undersigned attorney is reachable by telephone at (202) 625-3547. The correspondence address of record is provided below.

Respectfully submitted,

KATTEN MUCHIN ROSENMAN, LLP

IP Docket  
Katten Muchin Rosenman, LLP  
1025 Thomas Jefferson St., NW  
East Lobby, Suite 700  
Washington, DC 20007-5201  
Facsimile No.: (202) 298-7570  
Customer No.: 28285

  
Attorney for Applicants  
Andrew J. Bateman  
Registration No.: 45,573



ATTORNEY DOCKET NO. APPLICATION NO.  
MP0069 09/730,598

**LIST OF REFERENCES CITED BY APPLICANT**

DATE SUBMITTED TO USPTO: May 18, 2005

APPLICANT  
Zining WU, et al.  
FILING DATE GROUP  
121/07/2000 2133

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	6,708,308	03/16/2004	DE SOUZA, et al.			
	6,634,007	10/14/2003	KOETTER, et al.			
	6,691,263	02/10/2004	VASIC, et al.			
	6,581,181	06/2003	SONU			
	6,427,220	07/2002	VITYAEV			
	5,949,831	09/1999	COKER, et al.			

**FOREIGN PATENT DOCUMENTS**

*EXAMINER INITIALS	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION OR ABSTRACT (Yes or No)

**OTHER DOCUMENTS (Including author, title, date, pertinent pages, etc.)**


**EXAMINER** **DATE CONSIDERED**

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant(s): WU Date Sent: 5-17-05  
Client: \_\_\_\_\_ By: X 1st Class Mail  
App/Pat/Reg No.: 09 730,598 X Hand-Carried  
Filing/Issue Date: 12-7-00 \_\_\_\_\_ Other  
Docket No.: 213200.48 (MPL69) \_\_\_\_\_ U.S. P.O. Express Mail No.:  
Attorney: ASB  
Due Date: \_\_\_\_\_  
Title/Mark: Parity Check Matrix and Method of Forming Thereof

The U.S. Patent and Trademark Office date stamped hereon is the date on which the below-listed items were received:

Enclosures (including # of pages):

Transmittal 1  
Fee Transmittal w/ credit authorization 2  
IDS, 1449 2 references 15

DOCKETED



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Zining WU, et al. ) Group Art Unit: 2133  
Application No.: 09/730,598 ) Examiner: Guy J. Lamarre  
Filed: December 7, 2000 ) Confirmation No.: 9230  
For: PARITY CHECK MATRIX AND )  
METHOD OF FORMING THEREOF ) Date: May 17, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed PTO-1449. Copies of non-U.S. patent documents are attached.

In accordance with 37 CFR § 1.97(h), this Information Disclosure Statement is not to be construed as an admission that the information cited is or is considered to be material to patentability as defined in 37 CFR § 1.56(b), nor as an admission that the information constitutes prior art within the meaning of 35 USC §§ 102 and/or 103.

It is respectfully requested that the information listed on the PTO-1449 be considered by the Examiner, and that an initialed copy of the PTO-1449 be returned indicating that such information was considered.

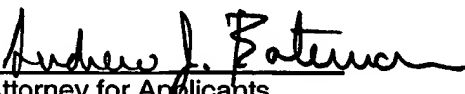
As a non-final Office Action has issued in this application, a Fee Transmittal with a Credit Card Authorization Form is submitted concurrently herewith authorizing payment of the required \$180.00 fee.

Should the Examiner have any questions, Applicants' undersigned attorney is reachable by telephone at (202) 625-3547. The correspondence address of record is provided below.

Respectfully submitted,

KATTEN MUCHIN ROSENMAN, LLP

IP Docket  
Katten Muchin Rosenman, LLP  
1025 Thomas Jefferson St., NW  
East Lobby, Suite 700  
Washington, DC 20007-5201  
Facsimile No.: (202) 298-7570  
Customer No.: 28285

  
Attorney for Applicants  
Andrew J. Bateman  
Registration No.: 45,573

APPLICATION NO.

09/730,598

**APPLICANT**

Zining WU, et al.

FILING DATE

**GROUP**

**121/07/2000**

**2133**

## U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS							
*EXAMINER INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION OF ABSTRACT (Yes or No)

**OTHER DOCUMENTS** (Including author, title, date, pertinent pages, etc.)

EXAMINER	DATE CONSIDERED
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

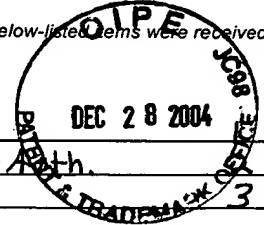


Applicant(s): Zining WU Date Sent: 12-28-04  
Client: \_\_\_\_\_ By: \_\_\_\_\_ 1st Class Mail  
App/Pat/Reg No.: 09/730598 ☒ Hand-Carried  
Filing/Issue Date: 12-7-00 \_\_\_\_\_ Other  
Docket No.: 213200.48 (MP0069) \_\_\_\_\_ U.S. P.O. Express Mail No.:  
Attorney: ASB \_\_\_\_\_  
Due Date: \_\_\_\_\_  
Title/Mark: Parity Check Matrix

The U.S. Patent and Trademark Office date stamped hereon is the date on which the below-listed items were received:

Enclosures (including # of pages):

Transmittal  
Fee Sheet w/ Credit Auth.  
IDS + 1449



**DOCKETED**

MP0069



PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
Zining WU, et al.	)	Group Art Unit: 2133
	)	
Application No.: 09/730,598	)	Examiner: Guy J. Lamarre
	)	
Filed: December 7, 2000	)	Confirmation No.: 9230
	)	
For: PARITY CHECK MATRIX AND	)	
METHOD OF FORMING	)	
THEREOF	)	Date: December 28, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed PTO-1449.

In accordance with 37 CFR § 1.97(h), this Information Disclosure Statement is not to be construed as an admission that the information cited is or is considered to be material to patentability as defined in 37 CFR § 1.56(b), nor as an admission that the information constitutes prior art within the meaning of 35 USC §§ 102 and/or 103.

It is respectfully requested that the information listed on the PTO-1449 be considered by the Examiner, and that an initialed copy of the PTO-1449 be returned indicating that such information was considered.

As a non-final Office Action has issued in this application, a Fee Transmittal with a Credit Card Authorization Form is submitted concurrently herewith authorizing payment of the required \$180.00 fee.

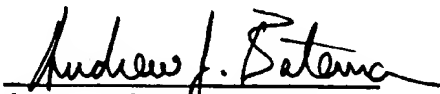
Customer No.: 23624

Should the Examiner have any questions, Applicants' undersigned attorney is reachable by telephone at (202) 625-3547. The correspondence address of record is provided below.

Respectfully submitted,

KATTEN MUCHIN ZAVIS ROSENMAN

Intellectual Property Department  
Marvell Semiconductor, Inc.  
700 First Avenue, Mail Stop 509  
Sunnyvale, CA 94089  
Facsimile No.: (408) 752-9034

  
Attorney for Applicants  
Andrew J. Bateman  
Registration No.: 45,573



Assistant Commissioner for Patents  
Washington, D.C. 20231

Date 3 / 9 / 01

Re:

Kindly acknowledge receipt of the accompanying:  
Response to Official Action.

Any. Docket

Application No.

132,000,084  
091,150,154

Check for \$

(claims fee)

Petition under 37 CFR 1.136 and Check for \$

Notice of Appeal and Check for \$

Information Disclosure Statement, PTO-1449 and

Claim for priority and certified copies of

Other (Specify)

Issue fee transmittal and Check for \$

By placing your receiving date stamp hereon and returning to deliverer.

By placing your receiving date stamp hereon and returning to deliverer.

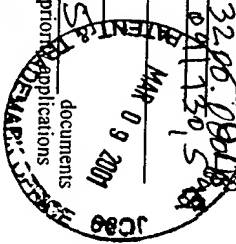
Due Date

3 / 1 / 01

Mo.

Day

Year



13200.00048



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
ZINING WU, ET AL. ) : Examiner: NYA  
Application No.: 09/730,598 ) : Group Art Unit: NYA  
Filed: December 7, 2000 ) :  
For: PARITY CHECK MATRIX ) : March 9, 2001  
AND METHOD OF FORMING ) :  
THEREOF )

Commissioner for Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Initially, Applicants request a change of Docket  
No. from "2666.69 to --13200.00048--.

In compliance with the duty of disclosure under  
37 C.F.R. § 1.56 and in accordance with the practice under  
37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is  
directed to the documents listed on the enclosed Form  
PTO-1449. Copies of the listed documents are also enclosed.

CONCLUSION

It is respectfully requested that the below-listed  
information be considered by the Examiner and that a copy of  
the enclosed Form PTO-1449 be returned indicating that such  
information has been considered.

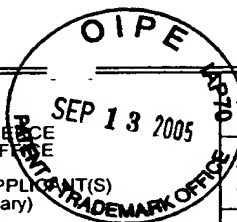
Applicants' undersigned attorney may be reached in  
our Washington, D.C. office by telephone at (202) 625-3500.  
All correspondence should continue to be directed to our  
address given below.

Respectfully submitted,

\_\_\_\_\_  
Attorney for Applicants

Registration No. \_\_\_\_\_

PATENT ADMINISTRATOR  
KATTEN MUCHIN ZAVIS  
525 West Monroe Street  
Suite 1600  
Chicago, Illinois 60661-3693  
Facsimile: (312) 902-1061

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)ATTY DOCKET NO.  
13200.00048APPLICATION NO.  
09/730,598APPLICANT  
ZINING WU, ET AL.FILING DATE  
December 7, 2000GROUP  
2133

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,295,218	10/81	Tanner	371	40	
	5,537,444	7/96	Nil, et al.	375	341	
	5,757,821	5/98	Jamal, et al.	371	30	
	5,926,232	7/99	Mangold, et al.	348	845.1	
	5,933,462	8/99	Viterbi, et al.	375	341	
	6,002,716	12/99	Meyer, et al.	375	231	
	6,021,518	2/00	Pelz	714	799	
	6,028,728	2/00	Reed	360	51	
	6,081,918	6/00	Spielman	714	746	
	6,009,549	12/99	Bliss, et al.	714	769	

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	"An Intuitive Justification and a Simplified Implementation of the MAP Decoder for Convolutional Codes", IEEE Journal On Selected Areas In Communications, Vol. 16, No. 2, Feb. 1995, Andrew J. Viterbi
	"Good Error-Correcting Codes Based On Very Sparse Matrices", IEEE Transactions On Information Theory, Vol. 45, No. 2, March 1999, David J.C. MacKay
58	"Low-Density Parity-Check Codes", Robert G. Gallager 1963
58	"Coding And Iterative Detection For Magnetic Recording Channels", The Kluwer International Series In Engineering And Computer Science, Zining Wu
	"Coding, Iterative Detection And Timing Recovery For Magnetic Recording Channels, A Dissertation, Zining Wu

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 1 of 1